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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,152	10/14/2003	Mark F. Sonnenschein	61623B	4793

109 7590 04/13/2005
THE DOW CHEMICAL COMPANY
INTELLECTUAL PROPERTY SECTION
P. O. BOX 1967
MIDLAND, MI 48641-1967

EXAMINER

ZALUKAEVA, TATYANA

ART UNIT PAPER NUMBER

1713

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,152

Applicant(s)

SONNENSCHIN ET AL.

Examiner

Tatyana Zalukaeva

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) ☐ Other: _____ |

DETAILED ACTION

1. Claim 1 has been amended to include the limitations on the amount of organoborane amine complex, on the amount of a heterocyclic ring opening moiety, and on the amount of Lewis acid in the composition.
2. Claims 1-3, 6-19 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3, 6-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recited amounts of organoborane amine complex, of a heterocyclic ring opening moiety, of Lewis acid in the composition are not described or supported by the instant specification, such as to reasonably convey to those skilled in the art that at the time the invention was filed, Applicant had possession of the claimed subject matter.

- With regard to the amount of heterocyclic compound the description is found on page 24, lines 1-5 of the instant specification, that calls for 1 perecent or greater, or 2 percent or greater, preferably about 10 percent, more preferably about 7 percent or less of the formulation.

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- With regard to the amount of Lewis acid, some indication is given in the table 12 on page 40, the amounts are ranging from 0-524%.

Thus, the claimed amounts are neither expressly, nor implicitly supported by the instant specification.

5. Claims 1-3, 6-19 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sonnenschein et al (U.S. 6,706,831 or 6,710,145) as per reasons of record.

US'831 discloses method of polymerization and a two part composition comprising one or more monomers having olefinic unsaturation, organoborane-amine complex one or more compounds having heterocyclic moiety comprising nitrogen or sulfur as a heteroatom and an effective amount of a compound that causes the complex to dissociate, i.e. decomplexing agent (abstract, col.2, lines 65-67, col.3, lines 1,2, 25-30, 33, 34, col.5 and 6, formulas 2-6, col.7, 8, formulas 7, 8 and structures in col.7, lines 50-60, col.8, lines 15-35). Lewis acids are described in col.9, lines 30-46. Two part compositions specified in col.10, line 55, col.11, lines 42-45. With regard to claim 4, specific amounts of components are presented in col.9, lines 50-67, col.10, lines 1-17 and are within the claimed ranges. The use of composition for modifying low surface energy polymers is taught in col.13, lines 24, 25, method of bonding of low surface energy polymeric substrates is disclosed in col.14, lines 1-19. See also col.15, lines 25-45. US'145 is the derivative of the same Application as US'831 and discloses analogous composition and processes (see abstract, col.4-8, col.9, lines 1-5, 55-60, col.10, lines 1-5, 8-42, col.11, lines 11-12, 65,66, col.12, lines 45-50, especially, col.14, lines 24-42,

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col.20, lines 30-60). Thus all the limitations of the instant claims are met by US'831 and US'145.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (571) 272-1115. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tatyana Zalukaeva
Primary Examiner
Art Unit 1713

April 11, 2005

A handwritten signature in black ink, appearing to read 'Tatyana Zalukaeva', with a long, sweeping horizontal stroke extending to the right.